DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-028797
Date Inspected: 30-Nov-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1530
Location: Job Site

CWI Name: Fred Michels and Jesse Cayabyab

CWI Present:	☑ Yes	☐ No		**Inspected CWI report:**	☐ Yes	☑ No	☐ N/A
Rod Oven in Use:	☑ Yes	☐ No	☐ N/A	**Electrode to specification:**	☑ Yes	☐ No	☐ N/A
Weld Procedures Followed:	☑ Yes	☐ No	☐ N/A	**Qualified Welders:**	☑ Yes	☐ No	☐ N/A
Verified Joint Fit-up:	☐ Yes	☐ No	☑ N/A	**Approved Drawings:**	☑ Yes	☐ No	☐ N/A
Approved WPS:	☑ Yes	☐ No	☐ N/A				
Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A				

Bridge No: 34-0006
Component: SAS OBG

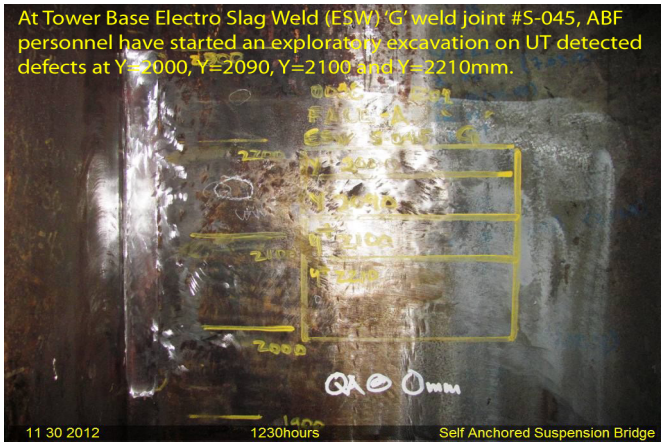
Summary of Items Observed:

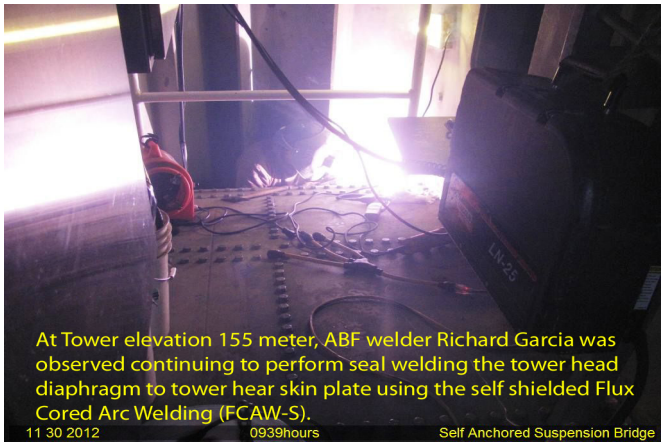
Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower elevation 155 meters, QA randomly observed ABF welder Richard Garcia continuing to perform seal welding between the Tower head diaphragm and tower head skin plate ‘G’. The welder was observed seal welding inside West shaft and South shaft chimneys with weld designation 8TSA6-1 and 8TSA6-4. The welder was noted seal welding in utilizing self-shielded Flux Cored Arc Welding (FCAW-S) with 0.072” diameter E71T-8 wire electrode. Prior seal welding, the paint coating on both sides of the joint was ground off and the plates were preheated to more than 150 degrees Fahrenheit. During the shift, QA noted ABF QC Fred Michels was on site monitoring the in process preheats and welding parameters with measured working current of 345 amperes and voltage of 23.4 volts. During the shift, seal welding of the Tower head diaphragm to Tower head skin plate ‘G’ with weld designations mentioned were still continuing when this QA was told to go to the tower base and observed the exploratory excavation on the UT detected defects.

At Tower Base Electro Slag Weld (ESW) ‘G’ weld joint #S-045, ABF personnel was first noted flush grinding the weld cover of the welded ESW at locations Y=2000, Y=2090, Y=2100 and Y=2210mm for the start of exploratory excavation on the UT detected defects. After the completion of the flush grinding on mentioned Y locations, ABF QC Jesse Cayabyab was observed performing Magnetic Particle Testing (MT) on the flush ground surface with no significant indication noted. This QA also performed the same test and noted same result. Per given instruction to the ABF personnel, the exploratory excavation will be done in every 1 mm increment that should be MT tested

and recorded. The ABF personnel continued the excavation at 1mm deep and then MT tested by ABF QC Jesse Cayabyab with no significant indication noted. This QA also performed the same test and noted same result. During the shift, the ABF personnel continued the excavation in 1mm increments using the same method of test and verification up to 4mm with same result. The shift was completed up to this depth of excavation.





Summary of Conversations:

No significant conversation today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer